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DYNACORD POWERMATE 1000-3 The New Power DATA PRICE 2,430 £ INPUTS 6 Mono, 4 Stereo TONE CONTROLS Mono: 3-band EQ, Low-Cut, Voice Filter Stereo: 3-band EQ **AUXILIARY BUSSES 6** EFFECTS 2 x 100 + 20 User POWER 2 x 1,000 W into 4 ohms DIMENSIONS 51 x 16 x 57 cm (table-top) 48 x 13 x 44 cm (rackmount) WEIGHT 14 kg

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INFO www.dynacord.de

If Prince still had his old backing group, "The New Power Generation", that would be the ideal slogan for the launch of the new PowerMate series. The Prince band has, of course, been consigned to history. Not so the PowerMate3, now leading the entire breed of powered mixers towards a bright new future

eneration change on stage: Dynacord 's developers have been busy; and, yet again, they've come up with the goods – in the shape of the brand-new, and truly astonishing, Power-Mate3 family of powered mixers. Aware that its predecessors, Power-Mate Generations I and II, had themselves set new standards for this breed of device, we were more than interested to see how this latest generation would shape up in practice. In our first test, we put the smallest model in the series, the Power-Mate 1000-3, through its paces

Channels

The test model is, as we have noted, the smallest model in the new series, offering six mono and four stereo input channels. The integrated digital power amplifier delivers 2 x 1,000 watts, in each case into four ohms. The family is completed by two larger models: the PowerMate 1600-3 with twelve, and the PowerMate 2200-3 with eighteen, mono channels; and since models numbers do generally mean something, you'll have deduced that they, too, offer four stereo channels.

The mono channels will accept both microphone and line level signals, in each case using balanced connections. Each of the mono channels is equipped with a three-band equalizer with a sweepable Mid; this is followed by a typical Dynacord feature, a Voice filter as well as a Low-Cut filter with a turnover frequency of 80 Hz. This type of tone control section proved its effectiveness in the earlier models and has therefore been retained.

The spec has, however, been expanded with the introduction of new auxiliary busses: in the third PowerMate generation, there are not four but six of these, each of which can be used independently. Two of these busses, as is typically the case, are switched pre-fader and therefore recommended for monitoring duties; two others are linked internally with the PowerMate's two multi-effects processors. The remaining pair can be switched, according to choice, pre- or post-fader; the choice is made for each bus separately but for all channels globally using a switch in the master section.

These additional aux busses can be used for a wide variety of applications: whether as additional monitor or effects sends, to provide an independent recording mix, or as separate sound reinforcement

ECHNIK

USB Deluxe

The new PowerMates boast a powerful four-channel USB interface. Thanks to modern driver technology, the Power-Mate, when combined with a desk- or laptop computer, can function as a digital home studio with four inputs and outputs. The requisite software, in this case Cubase LE, is even included in the delivery, so you can get started at once. A big plus in this context is the fact that the ASIO drivers supplied are virtually latency-free in their operation. The USB interface is also unusually flexible thanks to the choice of routing options: using the PowerMate's menu, you can elect swiftly, which of the desk's output busses you wish to route to the recording device. But not only in the home studio but also in live performance, the USB interface represents a invaluable addition to the spec: and when the band takes a break, a DJ armed with the usual software can take over the rig and transform the PowerMate into a control centre for his or her own performance.

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Among other things, the provision of auxiliary busses (previously four, now six) has been expanded

Speaker protection

The "Speaker Protection" alluded to in the spec turns out to be a dynamic circuit that serves to protect the connected loudspeakers. From the menu, you would suppose all that's involved here is a stepped reduction of the maximum output of the power amplifiers, but in fact the processor-controlled protective circuitry is considerably more sophisticated in its operation than that, having no influence whatever upon those impulses that are important to the dynamic range but preventing - and preventing very effectively - the power handling capabilities of the speaker being overtaxed for any length of time. In this way, it prevents the voice coils overheating and therefore protects the drivers reliably against overload.

busses, they have all bases covered. The two auxiliary busses are particularly interesting in the light of the USB interface on board the new PowerMate, but more of this later.

A glance at the stereo channels reveals only minor differences: one is that the centre frequency of the Mid (band-pass) filter in the stereo channel equalizers is fixed; another, that the stereo channels lack the low-cut and voicing filters offered by the mono channels. These are hardly shortcomings, however, as stereo channels are usually reserved for line level signals from devices like keyboards, samplers and the like that seldom call for drastic intervention. The essential control elements – mute and

PFL buttons, pan pots and channel faders – round off both the mono and the stereo channel strips.

Effects

The new PowerMates have two digital effects processors on board. In the current firmware versions, both processors offer you 100 effects programs as well as the possibility of creating and saving 20 programs of your own. In other words, anyone who finds their needs are not fully catered for by the factory presets – which, it has to be said, are very well programmed – is in the happy position of being able to do something about it.

The possibilities for intervention are comprehensive and of great practical value, making it possible to work not only very intuitively but also creatively with the two processors. A graphic display, four buttons and an encoder comprise the programming interface.

Outputs

On the output side, the PowerMate 1000-3 offers a wealth of options. In addition to the signal sum and an additional B output with level control, all the auxiliary busses are available – the two explicitly defined as monitor busses are even present on balanced XLRs as well as the more common jack sockets. The two monitor channels are equipped with notch filters in the Master section for feedback suppression. These sweepable filters have very sleep slopes (hence the name 'notch') and are therefore capable of eliminating feedback without otherwise making much impact upon the audio signal. Hardly the most filigree of solutions to the problem of feedback, but nonetheless a very helpful one at times.

Far more subtly differentiated, of course, is the sound texturing provided by the 11-band graphic equalizer, which can be introduced, according to choice, into the sum (the Master L/R channel) or else either or both of the PowerMate's monitor sends. With this, you can fine-tune the frequency response until just the right sound is achieved.





For keyboard soloists to trios, even the PowerMate 1000-3 offers enough channels (6 mono, 4 stereo). Larger bands or ensembles will find their needs catered to by either the 12- or the 18-channel model.

Amplifiers

The power amplifiers of the new PowerMate deliver $2 \times 1,000$ watts into 4 ohms, making the device suitable also for medium-sized venues. The power amplifiers can actually support impedances as low as 2.6 ohms, so up to three 8-ohm loudspeakers can therefore be driven from the same output.

Thanks to the use of digital Class D technology, the new generation of PowerMates are considerably lighter than their predecessors. The smallest model in the series, for example, used to weigh around 20 kg, whilst the new PowerMate 1000-3 (including the lid) tips the scales at a mere 14 kg – in other words, around 30 per cent less.

As an alternative to use with passive sound reinforcement boxes, the amps of the PowerMate can be redeployed to the monitor sends, allowing active systems to be driven from the line output of the sum. Even mixed configurations, such as passive tops and active subwoofers, can be implemented without any problems. The PowerMate offers a wide variety of options in this area.

Practice

The new PowerMate is highly intuitive in its operation, making the task of mixing uncomplicated and easy to perform well. Thanks to the integrated handle and removable lid, it is also very easy to carry. This has much to do also with the drastic reduction in weight, which has turned the third generation PowerMates into most agreeable travelling companions. It is also possible to work with the PowerMate without constantly having to consult the user manual. It is only for unusual tasks that the more detailed information in the manual is required.

The display of the new PowerMate is itself a helpful source of information as well as a functional control centre. It offers access to all the core functions of the device: the selection and editing of effects, the configuration of recording and playback channels via USB, the activation of the power manager, definition of the functions of the optional

footswitch – all these are done using the four function keys below, and the encoder alongside, the display.

In terms of sound, the new PowerMate is flaw-less. The tone controls are musical and unobtrusive in their operation, though at times one might wish for a second band-pass in the microphone channels to provide a more sophisticated means of licking into shape sensitive or complex signals. The Voice filter in the mono channels, on the other hand, turns out not only to be an invaluable aid to the shaping of vocal signals but also of great service when acoustic instruments are involved.

The third PowerMate generation begins where mixing amplifiers once left off. With its modern digital power amplifiers and two powerful effects processors, its capabilities are scarcely more limited than those of solutions involving separate power amplifiers and mixers. The smallest PowerMate boasts enough inputs for solo performers and even trios, whilst larger bands or ensembles will find their needs catered for by either the 12- or the 18-channel model.

ASSESSMENT

DYNACORD POWERMATE 1000-3

Powered mixer

- numerous features
- ⊕ intuitive operation
- effects flawlessly programmed
- high power amp output
- ① flexible bus structure

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